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ON THE CHARACTER OF PRIMITIVE HUMAN PROGRESS

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THE most remarkable thing among natural processes is the unfolding of the intellect and moral nature of man. Since his emergence from the animal state he has possessed powers comparable to those which he now manifests. Neither history nor speculation can reveal a period in his development when he was not making conquests evincing the same high order of intelligence as that which marks even his later career. In the earliest stages the individual man or the small group in a roving tribe had to approach the problems of life and environment without any effective tradition to guide or sympathetic collaboration with others to inspire. This called for a measure of independence unlike anything manifested by individuals today except in the labors of men of dominating genius. Among ruder peoples, in early times and at the present, the remarkable character of the discovery of truth is signalized by the acceptance of the new vision as something supernormal and sacred, akin to the activity of the gods and directly inspired by them. Though we have ceased to refer it to the supernatural, we ourselves understand it but little better.

Confronted with this problem, the man given to creative thinking seems no more able to effect a solution than another. He realizes that he knows not whence his fertile ideas come. Often they seem to spring up in his mind full grown, coming from depths which are not open to the view of consciousness. The thinker can describe some of the conditions which seem to be favorable to the appearance of the idea; but he cannot surely name its origin.

So has it been also in the appearance of the great motive forces which at different times have modified the whole outlook and prospect of human development as a whole. How they were conceived does not appear. That they have effected revolutions in thought and life cannot be denied. Some of the circumstances of their appearance we can see; but we cannot ascertain the prime source from which they sprang.

The first fundamental conquests over material nature, lost in the obscurity of a past from which not even tradition has come down to us, would now afford a sublime spectacle if the eye of history could find a means to behold them. Standing alone in the presence of nature, enveloped in darkness except for the meager light afforded by the glow of a mysterious genius arising or expanding in himself, primitive man found a means of mastery unlike anything before witnessed on this planet. He took the step on account of which he could cease to be driven about at the whim of circumstance and could introduce into his actions some measure of control over material forces which in themselves were of such magnitude as to overwhelm all physical power in himself and reduce him to mental impotence and mere animality, unless that power were directed by an understanding of himself and of phenomena which was sound in some at least of its fundamental aspects.

It was a marvelous advance when man first realized that he had a power in his being enabling him to bring under control some of these great forces of nature, in the presence of which he had before cowered with fear; and he was a long time in rising to the conception of harnessing these forces to his uses. His earlier advances seem to have been slow and to have been brought about largely by almost accidental discovery. How could it have been otherwise? What, other than unexpected successes, could first have brought man to a realization of the possibility of mastery? What is it in the nature of mind which makes it possible for it to exercise such control over matter? Certainly there is nothing conceived by primitive man which guided him to the realization of his first important successes. In fact, the matter is so difficult to understand that we have not yet formulated a satisfactory explanation, even though for many millenniums man has constantly exercised an increasing control over his environment.

A novel conquest over material things is in itself a victory of mind; and this constitutes one of the central elements in its meaning for the progress of mankind. Certain material things are in themselves essential to our welfare; we must have food and also protection against the discomforts of climate. But, however these may contribute to our physical needs, they can never inspire in us the emotions which constitute our chiefest delights. We instinctively feel that there is something finer in our nature than anything which may be gratified by merely physical satisfactions. The external world and its elements interest us in proportion as they are able to contribute values to our higher life. Whatever may be the material gains arising from increased control over nature—and these are great—more important values overshadow them or displace them in the field of our interest. Until we can extract from the material progress something to advance the interests of our higher nature we feel that it has not rendered us a service of the more vital kind. If the mind has not somehow made a gain in connection with the physical progress the latter is without essential import for us.

Moreover, the physical and the mental, in the stricter meaning of these terms, do not exhaust the whole of human nature and activity. Besides the material and that which is mental in the sense of being actuated primarily by the reasoning powers, there is the realm of emotion and religious experience—what we may call the spiritual aspect of man's nature.. We do not understand his development when we leave this out of account. We may tie it up as closely as we please with his physical experience and material environment, we may think of the spiritual as due to a delusion induced in him by phenomena which he does not understand; but we can not dismiss it from consideration. It is one of the great characteristic elements of his nature and must be reckoned with. In fact, it is not too much to say that no element in his development is properly understood in relation to his progress until its colors are seen in the light of his deeper emotional experiences.

The first fundamental step forward in the control of nature, whether taken by the individual or the collective mind, was the most novel mental event occurring after the appearance of life in the process of evolution on this planet. As such it challenges investigation. It marks the beginning of a mastery by the living over the non-living so that the former is no longer to be driven about by the latter but is to come itself into a state of authority. Neither history nor speculation can yield us a well-established opinion as to the stage at which this novel power was first realized by our ancestors; but an analysis of the elements of progress among primitive peoples, both of ancient and of modern times, will help us toward an understanding of this momentous event in our history.

Was the advance first made by an individual who rose far above his fellows and had a grasp of his surroundings unlike anything possessed by his contemporaries, who therefore projected from his personality into the life of man a force which lifted it to a new plane and gave it a new character? Or was it brought about by slow accretions of power accumulated by a sort of collective mind in some advanced tribe which had found a means of preserving its smaller advances and combining them into a whole possessing elements different from any of its parts? Or was it still more complicated than this and required the interaction of tribe with tribe and the accumulation of power through many generations finally to issue in such flower of novel achievement?

The answers to these questions are important for our understanding of the past and of the basic conditions for further progress. The experiments in the laboratory dealing with mental processes are trivial in comparison with this vast social experiment in coming to understand our environment. The former has the advantage that we know the conditions of the experiment; the latter, that the greatest forces of our experience have operated in all the grandeur of their most far-reaching powers. It is hard to conceive a price too great to pay for a better understanding of this colossal experiment.

Man's environment, both that which he has found in the external world and that which he himself has created, has served to release the powers inherent in his nature. It is this which gives to his deeper understanding of it the supreme significance which we find there. The external world has no power in itself by which it can project a force from itself into the mind of man and create there a new character. Neither is there any such potency in the environment of created truth and spiritual forces with which man has surrounded himself. The power is not obtained from any external source which we can bring under observation, either direct or indirect. Whatever we may think about the question as to whether the native force of man is an endowment more or less supernatural, made by a benevolent Creator, we find no reason now for believing that his acts are merely the direct acts of a Being of higher order operating through him. Whatever is the ultimate source of the power he now manifests, it resides at present in him and is not exerted by a supernatural activity governing each separate act.

This leaves to the environment, then, at most the opportunity of releasing this power and setting it into activity. That it has done this in a marvelous manner is apparent from many considerations, but from none more forcibly than from the fact that a novel material conquest has several times in our long history given a new color to our lives and a different character to our outlook.

What stage of development have we reached in this process of unfolding? What proportion of the native endowment of man has already been realized by completed achievement? How nearly has he gained his maximum control over his environment? To what has he reached relative to the fullness of his being, in the understanding of his own nature and powers?

On our answers to these questions will depend the character of our outlook on the future of the race, as to whether it shall be optimistic or pessimistic. If we feel that all, or nearly all, of the fundamental conquests have been made, there will be nothing left to us to give zest and meaning to our lives. No vision of great things to be achieved will stand out as the goal of our labors, inspiring us to efforts realizing the greatest force of our character. As a race we should cease to live in the future or rejoice in the visions of things to come; the activity of life would lose much of its charm for us and we should find our greatest comfort in meditations on the achievements of our ancestors. Nothing could more clearly indicate that the race had come to the period of old age; and we could hardly prevent the feeling that the time of its end was drawing near.

On the other hand, if the evidence should indicate that we are still in a stage of active development and that there is every reason to expect further advances, comparable to the greatest of the past, then the joy of life and labor will spring up and we shall take hold of our several duties with the spirit which arises from the conception of the most worthy things to be achieved. No labor will seem too long or task too arduous if it promises to lead us forward to a realization of things hoped for. Many workers will be ready to consecrate a life of intense application to the study of phenomena of every sort, however far some of them may be removed from the previous interests of mankind. No opening into the unknown will be so obscure or the prospect so dark as to drive away all thinkers. Every possible line of progress will be explored under the enthusiastic hope or expectation that something of value will be found on the way; and man will rejoice in his progress in fields for a long time cultivated and in territory just being opened to exploration.

It is clear that man must somehow obtain power, not merely latent but active, before he can enter upon a control of nature such as he has achieved. No measure of inherent possibilities will be sufficient. They must be realized by an actual grasp of present power in a state of successful activity. It could hardly be conjectured, and there is no reason to suppose, that the release of his energies was sudden like that of a coiled spring. It is far more probable that the process was a gradual one and that the accumulation of power would be better illustrated by the slow increase of force in a water turbine into which is admitted an increasing stream of water from a head which does not sink but perhaps rises slowly. In this figure the effect of the environment is represented by the action of the gate through the slow opening of which an increasing portion of the power in the head of water is admitted to the turbine and is thus released into effective work.

In our present state the greatest inspiration to an intellectual life and hence to an increase of power comes from the interaction of mind with mind. From its very nature this is the kind of influence which the individual primitive man would first be able to realize; for it is an influence emanating from that which is most akin to his own activity and consequently best able to find a means of entrance into his experience. This would lead us to expect that the first fundamental advance would be intimately connected with the relation of man to man in his mental life. Such indeed have been the conclusions of anthropologists, after a careful examination of the relevant facts. To the development of language, the prime means of the communication of mind with mind, has been given the honor of initiating the marvelous release of the powers of man.

Language is so intimate to the deeper experiences of the mental life and exercises an influence so definite and so characteristically its own over the development of an individual that the universal realization in mankind of such effects as it produces tends to increase in a marked degree the essential unity which has its origin in the common ancestry. If language had its beginning in a single center—perhaps the first home of the race—and spread thence throughout the world, then its unifying influence would have the additional effectiveness gained through the transmission to all mankind of the ways of thought first crystallized into its words and forms of construction.

That this unifying influence is highly effective is still manifest today. In many ways we see common elements in the civilizations of peoples possessing a common language which have a tendency to disappear if from any cause one of them comes to use another language. Conquerors have often realized this and have frequently sought to adjust a people to a new rule through forcing upon them the language of the conqueror.

There is a matter of a subtle nature in the way in which language makes it possible to pass the experience of one generation along to the next. The phenomena of nature present themselves to us ordered in space and time, but without apparent logical connections to bind them together. As long as we meet them merely in the multiplicity of their separate existences we can not get far towards an understanding of them or a mastery over them. It is necessary that they shall be ordered into groups or sets each held together by some tie which serves in our minds as a unifying element. Now the combination of distinct elements into a whole and the formation of these groups depends on a process which the mind constructs for itself slowly and only after much labor. Any means of giving a considerable measure of permanence to the constructions of one individual mind or of one age will be of great value in maintaining mastery and effecting its further development.

Now when a tribe of men reach agreement concerning the common elements of a set of objects, as for instance the trees in the forest, and signalize their realization of the common features possessed by them by giving to them some such name as *tree*, they crystallize into definite form a class of experiences felt by each of them in a more or less vague way. The idea denoted by the word becomes more distinct by constant recurrence and both word and idea take their places as part of the mental possessions of man.

Now a word into which so much experience of the race has been instilled can easily be taught to the children of a new generation and be made to serve for them as a nucleus about which they can gather experiences of their own similar to those first embodied in the word. Thus through the various words which they use they have a very subtle means of assistance in organizing their early experience so that they are able to make much more rapid acquisition of knowledge than their ancestors who first had the confusion of unorganized impressions out of which they must construct the first essential organization of truth.

There is another advantage, lying deeper than this need of understanding the material environment, which language brings to the new generation. The way of thinking of their ancestors is preserved in some measure for them in the constructions of their language, in the peculiar ways of expressing thought developed through ages of progress. Thus a certain significant part of the mental development of mankind is summarized into the form and words of language in such a way as to be capable of transmission and to be of unmeasured value in passing on to the children the acquisition of their ancestors.

It is clear that this thing which is of so much value in one respect has in it otherwise certain elements of danger. The prejudices of the past are transmitted along with the accumulated truth. But, in the whole process, the good far surpasses the evil, leaving a large balance on the side of progress.

Among the savages who first developed effective language there was a force of intellect not to be despised, by whatever standard of achievement it may be measured. That it grew up probably by slow accretions from age to age does not detract from its marvelous character. It means merely that it was a product of the collective rather than of an individual mind, as from the nature of things it was necessary that it should be. To separate out ideas of far-reaching importance in practical life and to agree to associate them permanently one by one with such fluid and evanescent things as sound symbols which should call them to the mind of every hearer acquainted with the language was an act which could be performed only in the presence of a deep understanding, dumb though it may have been, of the essential elements involved in the process.

In view of this first magnificent creation of the primitive mind we can not refuse to recognize that early man possessed powers which do not suffer in comparison with those manifested to-day. To be sure, he was in the presence of an environment of which he had little detailed and established knowledge and some of his conjectures went wide of the mark; but, without any tradition to guide, he went about the creation of those means of communication which have since served us in all our activity. It was a long time before systematic methods of investigation were developed; but here at the beginning we see at work the instinct to discern and to grasp the deeper essential matters, and we find it issuing in the wonderful invention of effective language.

Fire occurs in nature. Now and then it is kindled by the lightning from heaven and consumes the forest tree or even sweeps the woods in devastation. Or it may bound forth from the bosom of the earth in volcanic eruption and destroy everything in its path. To the primitive man it was doubtless at first a consuming monster; and he must have stood in awe of its mysterious power. But a tribe which hunted in the neighborhood of a volcano, whose action was regular, would become familiar with it and would learn to appreciate its warmth on a cold and dewy morning. Gradually its value would be perceived and after a time the more adventurous spirits would begin to experiment with it and even to bear it about with them on a burning fire-brand, notwithstanding their occasional experience with its terrible bite. In this way a realization of its uses would begin to develop, and the community as a whole would gradually find new values in the tamed monster. The process was one carried out perhaps essentially by the collective mind of the tribe rather than by individual initiative.

The idea of accumulating power through a long process of tedious labor and storing it, as it were, so that it might be released suddenly with almost explosive force was perhaps first realized in a large way in the invention of the bow and arrow. The significance of this achievement was three-fold; in itself it afforded a remarkable means of mastery over a certain part of the environment; it predicted the discovery of further means for the multiplication of power; it gave man a new sense of the dignity of the character unfolding in him.

These three values are in the order of increasing importance. They exhibit a feature common to all the more profound elements of human progress, namely this, that the scale of values increases rapidly in the direction of a greater emphasis upon mental or spiritual forces. Often it happens that what is material lies close to hand so that it is the first thing found on a superficial examination; but lying deeper are movements of a more profound nature affected in some essential way by the results of the material development and affording to it its principal significance. In order to understand the progress effected one must ascertain the meaning of these deep-lying elements and the way in which they bring about an increase of power or the development of character.

The bow and arrow does not occur in nature. There was a moment when it was used for the first time; in the nature of things it must have been an individual, and not the tribe or community, that made this advance. The original weapon may have been of the crudest construction and have been used merely as a toy; but there was wrought into it the one novel idea which has guided in the making of the most perfect instruments of its class. Whether the idea was arrived at by accident or by deliberate thought, we have here the introduction of a thing of prime importance due to individual achievement. Language was developed and the uses of fire were discovered through the combined activity of the community as a whole; but the invention of the bow and arrow must be assigned to individual genius. It seems to be the first important instance of a kind to be found with increasing frequency as the consciousness of the possibility of such achievement becomes more definite and more widely current and as individual thinkers set about the labor of creative thought with clearer purpose as to the ends to be attained.

The experience of mastery over the clay which took form at their wish and was rendered durable by methods constantly practiced by them, awakened in our ancestors a conception of their power to mold things according to will and to create that which would endure indefinitely. Through this they realized a new possibility in human development and began to reap the fruits of a further release of inherent power.

In their previous progress our ancestors had merely effected new juxtapositions of materials already at hand, as for instance in the construction and use of the bow and arrows; but now in the pottery which they had learned to make they had brought into existence a sort of material not previously to be found in their environment, perhaps not anywhere in the universe—a conquest the novelty of which has since seldom if ever been equalled in the ages of increasing control over nature. Our modern laboratories have carried the processes of the creation of new materials beyond what could have been predicted by the most optimistic prophet of the old time; but in doing so they have only developed the idea which was brought into partial realization by the genius of a remote people.

It appears that the intellect which made the first fundamental advance of this sort was certainly possessed of essential qualities of power not unlike those which have led in recent generations to that development of physics and chemistry which is the marvel of those who take an intelligent interest in man's success in understanding the relations of phenomena in his evironment. There has been a development of mind, there have been acquisitions of new power, especially through a more profound grasp of the essentials of method in discovery; but the fundamental basic qualities of intellect now and in the remote age when the art of making pottery was acquired seem to be of the same nature.

We may take pleasure in such ancestors as our forefathers showed themselves to be even in the periods of savagery and barbarism through which we have rapidly sketched their development. They stood in the presence of phenomena whose nature was awe-inspiring to the creature that first inquired concerning their meaning. With no traditions to assist, with no previous conquests or discoveries of truth to start them out, with only a dumb and undeveloped sense or instinct of the destiny of man to light the way into a darkness of ignorance more profound perhaps than we can conceive to-day when so much of the push of the past has already been realized in our individual lives before we come to contemplate philosophically the nature of our environment and our relation to it, they began a career of development to which nothing else in our ken is to be compared.